

# **Director's Report to the Fish and Wildlife Commission**

## **February 2-3, 2007**

### ***"A Sound Stewardship of Fish and Wildlife"***

We serve Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities.

#### **FISH AND WILDLIFE GOAL:**

##### ***ACHIEVE HEALTHY, DIVERSE AND SUSTAINABLE FISH AND WILDLIFE POPULATIONS AND THEIR SUPPORTING HABITATS***

**Mt. St. Helens Wildlife Area Emergency Winter Feeding:** Severe early winter conditions and public concern for the well being of the elk were factors taken into consideration in the decision to initiate steps to winter feed elk at the Mt. St. Helens Wildlife Area. Emergency winterfeeding commenced on Wednesday, January 10, 2007. Staff began by delivering 2,700 pounds of alfalfa hay per day. This interim rate was to allow the elk time to find and adjust to the hay. Use of the hay gradually increased to about 80 percent, and we have now increased to feeding about 4000 pounds (two tons) per day. This interim rate will continue while elk acclimate to the feed. We currently estimate that we have at least 400 elk on the wildlife area where the feeding is occurring. Soon we will begin to adjust feed rates to the estimated elk numbers, observed usage rates, and weather conditions. Depending on weather and usage rates, we plan to deliver 7 to 10 pounds per elk per day.

The hay we are currently using was grown in the Pasco area and is tested for quality before purchase. The bales are 3 by 4 by 8 feet and each weighs 1,350 pounds. The rectangular bales are loaded onto a flatbed truck, hauled to the wildlife area, and one employee separates the bales into flakes and pushes them off the truck as another slowly drives the length of the area. Two temporary employees have been hired to do most of the feeding. Almost all of the equipment involved in the operation is on loan from other agency programs and installations. Getting this short-term program under way has been a model of cooperation within the agency.

**Sea Otter Management:** Harriet Allen gave a presentation to the Black Hills Audubon Chapter on the current population status, foraging habits, and recovery plans for the sea otter in Washington. This species was extirpated until 1969 when a small number were released at LaPush. For many years, the population remained small and was confined on the outer coast. They now number 600 individuals and make forays into the Strait of Juan de Fuca, with wanderers going to the San Juan Islands and even Puget Sound.

**Sharp-tailed Grouse:** Region 2 and headquarters staff met with biologists from the Colville Tribes to review the results of recent sharp-tail translocation work and to plan this year's translocation effort. We plan to obtain birds from Idaho this spring. The group briefly discussed research needs and a draft recovery area map. Staff continued to gather background information for the sharp-tail recovery plan.

**Rocky Mountain Elk Foundation (RMEF) Pursuing Options to Conserve Upper Stemilt Basin Elk Habitat:** Regional Director Dennis Beich and District Biologist Beau Patterson met with Rocky Mountain Elk Foundation's Rance Block to explore possibilities for protecting important elk calving habitat in southern Chelan County. RMEF will explore the unique set of challenges and opportunities this watershed protection effort presents.

**Lyons Ferry Fall Chinook PIT-Tag Proposal:** The Lower Snake River Compensation Plan (LSRCP) has purchased 75,000 PIT-tags to be used in both the yearling and sub-yearling fall Chinook released directly into the Snake River at Lyons Ferry Hatchery (LFH). This would allow biologists and the hatchery to better estimate survival through the hydro-system, and recruitment to LFH, Lower Granite Dam (LGD), and the Tucannon River. The Snake River Lab (SRL) is finalizing study design to determine how many tags would need to be inserted into each group to ensure statistical validity. LSRCP proposed 47,000 tags be inserted into the yearling release group, and 28,000 to be inserted into the sub-yearlings. Once numbers are finalized, either WDFW or a contractor will be utilized to put the tags in the fish. It appears this will be a permanent addition to tagging and marking requirements at LFH.

**Kokanee Workshop:** Fish Program staff from Region 1, including representatives from hatcheries, fish health, and fish management, attended a workshop in Ellensburg on January 16-17, 2007, to evaluate progress on plans to replace Lake Whatcom as the sole source of eggs used statewide for kokanee production. Region by region kokanee program egg needs were identified, and regional egg sources were identified and discussed. Resources needed to continue to collect wild stock kokanee eggs and maintain small hatchery broodstock projects in 2007 were identified. The constructive discussion generated at this workshop was greatly enhanced by the collaboration between Hatchery, Science, fish health, and Fish Management staff attending this workshop.

**Wynoochee Dam Mitigation Meeting:** Staff attended an initial cross-program meeting to discuss the proposal from Tacoma Power to provide mitigation for the Wynoochee Dam and develop a Department proposal. The proposal from Tacoma Power would include its quantification of habitat in the upper Wynoochee River above the dam and between the barrier dam and Wynoochee Dam. This habitat quantification exercise would then lead to developing an appropriate annual goal for adult salmon and steelhead transport above these two reaches. In addition, Tacoma Power would help modify the trap and haul facility to accommodate minimal sorting of species and provide the Department with funds, currently being held in trust, for use on fisheries enhancement projects in the basin. Department staff would prefer to use the steelhead and salmon goals specified in the FERC license, which are likely to be considerably higher than the results from Tacoma Power's habitat quantification exercise. However, we do support improving the trap and haul facilities and using the trust funds for fisheries and habitat enhancement projects.

**Invasive Zebra Mussel Threat Increases with New Discovery:** “Please, let me be wrong” reported Wen Baldwin, Lake Mead Natural Resource Area Volunteer, in hoping that the new establishment of Zebra Mussels, verified in Lake Mead just a few days ago, has not already spread to more marinas. This has been a pivotal discovery as it is the first population established west of 100 degrees west longitude. Lake Mead straddles the Nevada and Arizona boarder and is only about a 12-hour drive from Washington State.

Zebra Mussels are considered highly invasive biofoulers that occlude pipes in municipal and industrial raw-water systems, requiring millions of dollars annually to treat. Zebra Mussel densities have been reported to be over 700,000 individuals per square meter in some facilities in the Great Lakes area. They produce microscopic larvae that float freely in the water column, and thus can pass by screens installed to exclude them. Monitoring and control of Zebra Mussels costs millions of dollars annually nationally. Zebra Mussels also negatively impact aquatic ecosystems, harming native organisms (including already imperiled indigenous mussels).

The Aquatic Nuisance Species Unit is working closely with the national 100<sup>th</sup> Meridian Initiative and other stakeholder groups to address this issue. Zebra Mussels have been prohibited in the state since 1996. Although this is the first case of a confirmed established population, most western states have regularly intercepted boats with attached Zebra Mussels before they could launch. Washington State has had five confirmed findings on commercial vessels since 2000 (limited inspections) with the most recent in December. This one was only caught through diligent tracking by Officer Eric Anderson after a report from California came in that a boat was heading our way. Legislation proposed by the Enforcement Division for 2007 will improve and expand our boater inspection capabilities, which are the primary prevention mechanism to keep this species from invading state waters. This is especially important due to increased cross-country vessel sales and professional fishing tournament activities.

The picture below shows the hull of a sailboat found recently in Oklahoma and heavily fouled with Zebra Mussels.



**Plan to Haze Sea Lions in the Bonneville Tailrace to Reduce Fish Losses to**

**Predation:** On January 9, 2007, representatives from the states of Washington, Oregon and Idaho met with NOAA Fisheries and U.S. Army Corps of Engineers (USACE) to discuss the action plan proposed by Washington and Oregon biologists for non-lethal hazing marine mammals below Bonneville Dam. The hazing plan is designed to deter pinnipeds from the Boat Restricted Zone (BRZ), one-half mile below the dam – during daylight hours (8-10 hrs/day) on a seven-day per week basis from March 1 through May 31, 2007. The goal of the plan is to reduce predation on anadromous salmonids listed under the Endangered Species Act during the peak adult migration of the spring run. This work will be conducted under funding from the NOAA Fisheries.

In addition, NOAA is currently reviewing the States' section 120 Permit to allow limited lethal take of sea lions under the Marine Mammal Act. Garth Griffin from NOAA fisheries indicated that NEPA considerations must be addressed and NOAA will announce its decision in the near future.

Predation by seal lions on white sturgeon below Bonneville Dam – from now to March 1 – is not addressed by the NOAA Fisheries funded hazing plan. Last year, during the course of diverse field activities, staff from Region 5 and from ODFW spent over 400 hours observing marine mammal activity in the Columbia River from late December through April. Predation of over 100 sturgeon and 75 salmonids was observed. In addition, predation at Bonneville Dam, documented by the USACE, totaled 233 white sturgeon through March 27, thirty-two of which were fish over legal-size. Department fisheries and wildlife staff jointly prepared a marine mammal predation decision package for consideration by the state legislature in the 2007-2008 biennial funding cycle; however, this package has not received funding. The Department is currently looking into any possible options for funding sea lion hazing to protect the Columbia River sturgeon resources.

**Halibut Total Allowable Catch (TAC) for 2007:** IRM staff attended the annual meeting of the International Pacific Halibut Commission (IPHC) during the week of January 15, 2007. At the meeting, IPHC staff had recommended revising the stock assessment methodology for all areas, which included reviewing the stock from a coastwide perspective, attributing proportions to areas based on survey results, and applying a standardized commercial selectivity to all areas to calculate the exploitable biomass. Under this new method, the Area 2 (U.S. West Coast, British Columbia, and Southeast Alaska) halibut TAC would decrease about 26% in 2007 from the 2006 level. There was considerable discussion about the detrimental effect this would have on recreational, tribal, and commercial fisheries in these respective areas. Stock assessment authors also pointed out that continuing with the status quo method would likely not result in a conservation concern for the coastwide stock. After much consideration and discussion, and review of different proposals, IPHC decided to continue to use the status quo method to calculate the Area 2 TAC. This produces an Area 2A (West Coast) TAC of 1.34 million pounds, a light decrease from the 2006 TAC of 1.38 million pounds.

**Sullivan Creek Hydroelectric Project:** Pend Oreille Public Utility District (PUD), owner of the Sullivan Creek Project, filed a petition for Declaratory Order with the Federal Energy Regulatory Commission (FERC). The current license is due to expire in 2008 and the PUD is seeking to end FERC's jurisdiction and retire the project. At issue is the process for decommissioning the project. Normally FERC initiates a decommissioning process where studies are conducted and project facilities are removed to retire the Project with minimal impacts. FERC's action on this request could have implications on whether the facilities remain a barrier to fish passage. WDFW and other agencies have intervened in the process.

**Boundary Dam Relicensing:** Seattle City Light (SCL) filed their Preliminary Study Proposals (PSP) with the Federal Energy Regulatory Commission. The PSP contains 24 individual study plans. The comprehensive document has required a significant amount of staff time to review. Generally, SCL has been responsive to WDFW input on previous drafts so the final PSP looks good, although, we filed a few additional comments regarding studies examining project effects on benthic macro-invertebrate communities.

**Walla Walla Bi-State HCP Contract:** WDFW staff worked with Walla Walla County to complete a contract to continue work on the historic Bi-State HCP. This agreement seeks coverage for Walla Walla River irrigator operators (and possibly others) in Oregon and Washington. Work has been ongoing since 2003. WDFW worked on a set of deliverables for the 2007 calendar year for this Section 6 USFWS funded project. WDFW will administer the contract, provide technical assistance and monitor progress. The HCP is estimated for completion sometime in 2008 or early 2009.

**Water for Fish and Wildlife Very Limited in Squilchuck/Stemilt Watersheds:** As the WRIA 40A Planning Unit moves forward on completing their watershed plan by June 2007, almost all of the existing data shows that future growth in these watersheds could greatly impact fish and wildlife habitats. Solutions to protecting the existing resource value and water use will be a priority as the plan is implemented later in the year. Additional storage opportunities may relieve some of the future burden. TAPPS has been working with the Planning Unit and has recently completed a comprehensive fish passage inventory (outstanding job by the way!) that will help prioritize passage/storage work within the watersheds.

**Camas Heights Development Violation:** Region Two staff have been working with Chelan County, the Department of Ecology, and the Department of Natural Resources since last May to restore a 90 acres site off Blewett Pass that had been illegally logged, roads built, and instream structures put in (including a dam and several culverts). In December, DOE issued a fine of \$14,000 to the developers for failure to obtain a stormwater permit, a hydraulic permit, a forest practice permit, blocking a tributary to fish-bearing water with a dam, and introducing large amounts of sediment into the creek. Soon after, the developers submitted site designs for mitigation. These plans finally give the developers a completed HPA application to address restoration of the site.

**Tripod Complex Fire Update:** Region staff working with a Collaborative Action Team (CAT) composed of stakeholders from the timber industry and environmental organizations has been asked to assist the Forest Service in crafting a salvage proposal for the portion of the Okanogan forest that was burned. The CAT has focused on trying to expedite salvage of burned material this winter in order to harvest the wood over snow when damage to soil would be minimized and before insects have penetrated the wood making it non-marketable. The Forest Service has opted to do a lengthier EIS, which proposes to salvage dead and dying trees from approximately 2,800 acres within a portion of the area burned by the fire. This salvage will include harvest that may have environmental impacts over a small area but maximize harvest in order to provide the greatest monetary return. This action resulting in the harvest of approximately 28 MBF of timber will require amendments of the Forest Plan to allow harvest of green trees larger than 21' diameter breast height that are expected to die from fire effects, allow motorized access in Management Area 26 (which is deer winter range) during the winter season to facilitate salvage operations, and exceed open road density standards in discrete management areas as a result of salvage operations. This money then will be put toward maintaining the green harvest program.

**Wild Horse Wind Power Project:** The transition of ownership and management of the Wild Horse Wind Power Project from Horizon to Puget Sound Energy is complete. The construction phase of the project is over, the wind farm is at production capacity, and day-to-day operations and maintenance have been transferred. Seeding and restoration of the site per contractual obligations was about 80 percent complete before the site was snowed in for the winter. Seeding and erosion control work will resume in the spring. Horizon and its subcontractors will remain on retainer to complete site restoration work. We remain concerned with the discrepancies between the impacts that occurred during site preparation and construction and impacts described within the environmental impact statement. In areas where seven parallel cable trenches converged, the clearing limits exceeded 200-feet in some of the most sensitive habitat at the site, potentially affecting ecological connectivity and creating migration barriers for some species of wildlife. Further discussion and monitoring of site restoration activities will occur in the spring. Staff is preparing a synopsis of challenges and concerns as well as successes regarding this project for use in updating WDFW's Wind power Guidelines.

**Cabin Creek and Upper Yakima River Basin Acquisition Project:** Ownership of over 1,400 acres in strategic locations near the town of Easton along the Yakima River and in the lower reaches of Cabin Creek was recently transferred to WDFW. These lands were acquired through significant cooperative work between American Forest Resources, The Cascades Conservation Partnership, the Cascades Land Conservancy, the U.S. Fish and Wildlife Service, the Monahan family, Washington State Parks, Washington Department of Natural Resources, and WDFW. These lands are low elevation and close to Interstate 90. Therefore, the threat of development was great, and this project has successfully protected key habitat connectivity in a landscape transitioning from forestry to rural housing. WDFW Habitat Program, Wildlife Program, and Real Estate staff all played key roles in making these acquisitions a reality.

## **PUBLIC GOAL:**

### ***ENSURE SUSTAINABLE FISH AND WILDLIFE OPPORTUNITIES FOR SOCIAL AND ECONOMIC BENEFIT***

**Combined Mule Deer Foundation/FNAWS Hunting Exposition:** Wildlife Program staff attended the Western Hunting and Conservation Expo in Salt Lake City, Utah. At the Expo, the Foundation for North American Wild Sheep auctioned the Department's California bighorn sheep auction permit, generating \$61,000 – the highest value ever for a California bighorn sheep permit in Washington. Ninety percent of the funds generated from the permit come back to the Department and are dedicated to bighorn sheep management. While at the meeting, biologists for all western states attended a wild sheep biologist meeting. Attendees discussed the recent creation of a wild sheep working group, which was established at the Director's winter Western Association of Fish and Wildlife Agencies meeting last month. The first task will be creating a guidelines document for managing wild sheep near domestic sheep.

Wildlife Program staffed two booths at the event. The deer booth showcased the Mule Deer Cooperative Research Project, as well as hunting opportunities related to the Eastside and Westside Deer Auction tags that were sold on the Department's behalf by the Mule Deer Foundation. Total gross funds generated were \$16,000. WDFW personnel included Woody Myers, David Volsen, William Moore, and Jerry Nelson. Staff did a great job explaining deer biology and hunting opportunities to the public, most of which were pleasantly surprised by the deer hunting opportunities available in the Evergreen State. WDFW was presented in a positive and professional manner, and we received a lot of great feedback from the attendees and the hosting non-government organizations. Kudos to the Wildlife Program.

**Lower Columbia River Sturgeon Sport Fishery:** Intergovernmental and Region 5 Fish Program staff met with Oregon staff and the Columbia River Recreational Advisor Group January 18, 2007 to discuss sturgeon and spring chinook issues. The principle sturgeon issue dealt with the need to identify fishery modifications for 2007 and 2008 to access 4,250 white sturgeon left over from the 2006 fishery. Columbia River sturgeon fisheries are managed using annual harvest guidelines. The recreational share is distributed between the estuary fishery and the fishery upstream of the Wauna powerline crossing at Cathlamet. Only 8,550 of the 12,800 fish guideline for above Wauna were caught in 2006, leaving 4,250 fish to be divided equally between the 2007 and 2008 seasons. The current fishery structure above Wauna allows retention Thursdays, Fridays, and Saturdays during January-July and October-December. Discussions between staff and advisors focused on how best to access these additional fish by adding one to two additional days of retention per week. Technical staff evaluated the suggestions and incorporate them into final season options developed for public review at the January 25 Compact / Joint State Hearing in Vancouver. The season modification adopted at the Joint State Hearing was to add Sundays to the current Thursday-Saturday retention season structure.

**Adopt an Access:** Steve Sherlock met with Pat Cusack, Technical Administrator with the Shelton School District, about the Adopt an Access Program. The school district would like us to give a presentation to high school students on how and where they can adopt an access area site.

**Columbia River Commercial Fisheries:** Columbia River commercial fishers have landed nearly 600 sturgeon in the first two periods of the winter sturgeon fishery. The fishery is scheduled for one day per week through February 21, with a harvest goal of about 1,600 fish for this season. Prices paid to the fishers ranged from \$2.00-\$2.50 per pound.

**Ringold Steelhead Fishery Update:** For the month of December 2006, an estimated 176 steelhead were caught in the Ringold area steelhead fishery - 149 ad+rv (Ringold-origin), 23 adipose clip only (Upper Columbia hatchery origin), and four (4) wild fish. WDFW staff interviewed 31% of the estimated angler effort for the month. The catch was well above that in December 2005 (only 96 caught) and similar to the catch in 2004 and 2003. Total catch for the fishery since opening on October 1, 2006 is 1,281 steelhead. Only 55 wild steelhead (4.3% of the total) have been caught and released to date. This season, anglers have caught 61 "recycled" hatchery steelhead that were captured at the Ringold Hatchery trap in late October and November, marked with a caudal clip, and transported and released in Richland to provide additional harvest opportunity.





## **FUNDING GOAL:**

***ENSURE EFFECTIVE USE OF CURRENT AND FUTURE FINANCIAL RESOURCES IN ORDER TO MEET THE NEEDS OF WASHINGTON STATE'S FISH AND WILDLIFE RESOURCE FOR THE BENEFIT OF THE PUBLIC***

**Federal Audit Exit Meeting for Wildlife Area PR Contract:** In response to a federal audit finding, Paul Dahmer reported to federal auditors that WDFW will revisit and modify the process to record the fair market value of in-kind/bartered transactions associated with grazing permits and other program income activities. The PR Annual Performance Report will now report all cash program income and a fair market value for all in-kind/bartered agreements in the place of cash payments.

**Wildlife Areas Habitat Conservation Plan (HCP) 2007 Grant Proposal:** WDFW submitted an application to the U.S. Fish and Wildlife Service for funding from the 2007 Cooperative Endangered Species Conservation Fund (Section 6). A total of \$575,000 was requested to continue the third year of development of the Wildlife Areas Habitat Conservation Plan. These funds would support continued public outreach, model development, GIS-based inventories of species, habitats and land management activities, and initiation of a cumulative effects assessment. If funded, a 30 percent state match would be contributed. Development of the HCP is expected to take six years (2006-2011).

## COMPETENCE GOAL:

### ***IMPLEMENT PROCESSES THAT PRODUCE SOUND AND PROFESSIONAL DECISIONS, CULTIVATE PUBLIC INVOLVEMENT AND BUILD PUBLIC CONFIDENCE AND AGENCY CREDIBILITY***

**2007 Sportsmen's Show Display (Visit Washington's Wildlife Areas):** Olympia Lands Division staff and Mike O'Malley have developed this year's sportsmen's show display, which will feature WDFW wildlife areas and access sites. The display will include specific wildlife area posters, a statewide map, and messages about WDFW lands. We will also have photos, a Chuck Boland video splice of various wildlife area topics, business cards with website addresses guiding the public to additional wildlife area maps, wildlife area plans, wildlife area and access site information, GoHunt information, and information on buying a Vehicle Use Permit.

**Fir Island Snow Goose Update:** Skagit County Officers conducted an all hands emphasis patrol on the last weekend of snow goose season on Fir Island. Several local hunters told WDFW Officers that you would have to be crazy to violate on Fir Island with all the Officers working. A complimentary article on the Fir Island snow goose season appeared in the Skagit Valley Herald. The article was a result of WDFW initiating contact with a reporter and then taking her on a ride along. The thought was that as long as hunters and landowners on Fir Island were pleased with the status of this seasons' hunting season we ought to get some positive press. It sure wouldn't hurt as we develop a long-term snow goose hunting management plan as requested. One subject was warned for trespassing after he went on private ground to retrieve a wounded goose and another Oregon hunter was cited for an unplugged shotgun.

**Accident Victim Owes His Life to Officer Brian Alexander:** While patrolling in the High Country between the headwaters of the Humptulips and Wynoochee rivers, Officer Alexander observed a man standing in the middle of the road attempting to start a fire. When approached, the man was shivering and was not very coherent. Officer Alexander observed vehicle tracks going off the road down a steep embankment and asked the man if he had crashed, the subject said he had driven off the road the previous evening right at dark. Officer Alexander observed the man's truck upside down in the snow approx 30-40 feet below the road. After checking the man for injuries he was put in the truck to get warm from the heater. While trying to talk to the man to find out what happened, it became apparent that the man had possibly suffered a serious head injury. He was dizzy and began vomiting out of the vehicle and could not remember much. Officer Alexander summoned aid to respond due to the head injury, and the possibility of hypothermia. Officer Alexander was able to find out that he had been upside down in his truck for the past 16-17 hours unable to get out after waking up inside of the crashed truck. He eventually shot out his back window and crawled out of the wreck just prior to Officer Alexander's arrival. Aid cars were unable to reach Officer Alexander's location due to the ice and snow on the logging roads so the man was transported to them. He was quickly tended to by EMS and admitted to Community Hospital. After 5 hours the vehicle was finally recovered. Officer Alexander later checked on the subject at the hospital and met with his wife. The man had suffered a head injury, and back injury and had come dangerously close to succumbing to the frozen elements.

**Man Cited for Illegal Duck Hunting:** Officers checked duck hunters in the Burlington area and found a father and his two sons with unplugged shotguns, no small game licenses, no migratory bird validation and 37 lead shot shells. The adult was given a citation for the new high lead shot fine and warned on the other violations.

**Department of Natural Resources (DNR) Exchange:** Real Estate Services has sent out Notices to Proceed to the appraisal contractors to begin appraisal work on the WDFW-DNR statewide land exchange. Due to the size of the project, assignments will involve five different appraisal firms under six assignments. The completion date for the appraisal work is September of 2007.

**Indian Artifacts Seized:** Officers were requested by military police to investigate subjects digging in an Indian Cultural Site. The subjects were located and denied involvement. Officers interviewed the subjects and eventually obtained confessions. Thirty-five pieces of Indian artifacts, including a bone, were located in one of the subject's vehicles. Evidence was seized and the case has been turned over to USFWS.

**Coastal Crab Fishery – Commercial Vessel Seized:** Officers once again flew the coastline before the opener. While this was occurring, additional Officers were handling a complaint from a commercial fisherman that gear was in the water a full 2 hours before the season opened. Officers were directed to the coordinates given and gear was detected with the aid of night vision. While officers appreciated the tip, the reporting party had a problem of his own – he possessed 140 crab pots in excess of his limit onboard a vessel being used to barge his gear. This was handled later. Evidence was recovered from the 62-foot vessel's electronics that showed the operator had begun to deploy his gear at about 9:00 p.m. on January 4, 2007, eleven hours before the open season. He finally admitted to the violation. His motivation to get his 400 plus crab pots off of his deck was related to getting back across the Grays Harbor bar at high water, otherwise, severe conditions would dictate that he would have to sit it out in the ocean until the next high tide period. (Note: 95% of the Westport commercial crab fleet made the business decision to stay in port because they knew that they would not be able to deploy all of their crab gear and then be able to return to port in time to safely cross the bar.) A few other boats had chosen to go anyhow. Because they waited to fish until the season opened, they were forced to sit out at sea and get thumped by Mother Nature while our suspect was comfortably tied to the dock. Setting gear early provides a distinct advantage over the competition. Access to the prime fishing grounds and getting first crack at the available crab can have a massive bearing on profits. Most of the crab caught during the Coastal Crab Fishery is caught within the first two weeks of the season, even though it is open from December to September. To take the profit out of poaching, the \$1.5 million vessel was seized for forfeiture action. The operator decided to settle with the Department that evening for \$10,000. Criminal charges will be referred to the county prosecutor.

**Turkey Complaints Continue to Escalate:** Wildlife is no longer willing to trap and relocate as most suitable release sites now have existing turkey populations. Turkey complaints are the up and coming wildlife control problem in Region One. Officers arranged with the Northwest Turkey Federation (NWTF) for the purchase of two bulk rolls of netting to be used by the Colville and Spokane detachments for turkey damage complaints where necessary. The fish type nylon netting comes in 14' x 1000' rolls. The netting is designed to keep the turkey from getting on haystacks for fear their feet will become entangled. Each complaint if the netting is the solution will be cut to fit the haystack being damaged. The netting will cost the NWTF approximately \$2,000. The purchase will hopefully be completed by the end of January. To date we are issuing kill permits for turkeys on major cattle feed lot complaints. One landowner has killed 19 so far. Carcasses are going to food banks as available.

**Beach Contaminants Identified:** Officers contacted the Island County health authority to discuss the closure at Freeland Beach from early 2006. The closure will remain indefinitely until Island County and Washington Department of Health can determine the source of the bacterial contamination. This will be hard news for many clammers as Freeland is the most productive clam beach in Region 4. Numerous grants have been obtained to help determine the source of the contaminants.

**Region Two Cougar Incident:** Just outside of the city limits of Leavenworth Officers were called regarding a report of another cougar attack on a pet dog. The homeowner said that at around 2:00 a.m. he heard a commotion coming from the porch. He went outside and saw his basset hound and a cougar in a fight on the front porch. The homeowner attempted to rescue his pet, and was bitten on the finger by the cougar. The dog was pulled away, and the cougar left. Officer arrived at around 3:00 a.m. with two local hound hunters and their dogs. It was about 10 degrees, with three to four feet of snow making it very difficult to track the cougar. Additional officers and hound hunters were dispatched and after a long and difficult track the cougar was caught under a homeowner's deck in Leavenworth and was dispatched by an officer using his duty weapon. This cougar had been tracked for over twelve hours, had traveled over three miles and had gone through several residential neighborhoods, past two schools and the Leavenworth ski area, swam the Wenatchee River and fought with the hunting dogs at the end. WDFW Officers used snowmobiles, snowshoes and patrol vehicles in the effort to catch and kill this cat. Seven hound hunters and a couple of dozen hunting dogs were utilized. The head of the cougar will be submitted for a rabies test per policy. Officers Grant, Oswald and Treser really did an outstanding job on this response. When you think of ALL the things that can go wrong on a long, hard chase like this, it really comes down to the outstanding Officers that do these types of things with such great results. We are very proud of all three officers for a job well done!

**Commercial Sturgeon Update:** Officers checked commercial sturgeon fisherman by boat from Willow Grove to the Willamette River. Four boats were boarded. The gillnetters stated it was the best fishing they have ever had for sturgeon on the Columbia River. One fisherman had so many fish on board that he and everyone else were concerned that his small vessel would sink. He offloaded his net onto another vessel so that he could get back to the marina safely. In all, the four boats had 230 sturgeon.

**Deer Poaching/Methamphetamine Arrest:** Officers contacted a subject standing in the road by a vehicle, holding a rifle. The subject appeared to be very nervous and stated he was coyote hunting. While contacting the suspect he observed a second subject, about 80 yards away, dressed in camouflage and holding a bow. Officers then noticed blood on the subject's clothes and saw fresh hindquarters and back straps in the back of the vehicle. One subject was arrested and the other fled into the woods. Three meth pipes were located on the subject. Multiple spotlights were in the vehicle as well as a flashlight that was taped to the barrel of a rifle inside the vehicle. The vehicle was seized and impounded. The subject was booked into jail and Officers prepared a warrant. Washington State Patrol and Kitsap County Sheriff's Office assisted with an unsuccessful search of the second subject.

**Contaminated Vessel Held:** A vessel contaminated with Zebra Mussels was detained at the Cle Elum weigh station. Officers responded and documented the information necessary for follow up. The boat is now in LaConner and will be de-contaminated. This is a major step in the cooperative process between WDFW Enforcement and Washington State Patrol.

**Big Seas – Big Case:** Officers received information that a non-tribal commercial crab vessel was fishing in closed coastal waters north of Destruction Island in a Tribal Special Management Area (SMA). Officers then coordinated with the USCG at air stations Port Angeles and Astoria and flights deployed to locate this vessel. A crew for WDFW's Corliss was organized and got underway from Westport along with a USCG patrol boat in an effort to locate the vessel. USCG helicopters spotted the suspect vessel engaged in pulling crab pots in the closed area and patrol vessels were directed to that location. Officers responded to USCG Air Station Port Angeles and the USCG Air Station Astoria to debrief the helicopter crews, review photos of the suspect vessel, and obtain statements. This critical information was then passed onto the Officers on the patrol boats. The USCG patrol boat and the Corliss located the vessel and ordered the operator to Neah Bay since sea conditions prevented a boarding. While en route to Neah Bay, the Corliss located 60 crab pots deployed in the closed area that belonged to the suspected vessel.

Once secured in Neah Bay, the suspect operator and crew were interviewed. Four different versions of why the gear was in the closed area were given by the suspect. After a long night in Neah Bay, 1,629 pounds of crab were seized the following morning, along with 30 crab pots believed to have been used to take illegal crab and then stacked on the suspect vessels deck. The next day, the Corliss got underway once again and searched the closed area for the presence of illegal gear. The 60 crab pots were located and seized. Many of these crab pots did not have functioning biodegradable escape mechanisms, appearing to have been treated with a substance. This prevents the cotton cord from rotting away, completely circumventing regulations important to limiting the adverse effects of derelict fishing gear on marine life. The crab pot buoys also did not possess tags as required. The tagging system is a tool used to assist in the enforcement of crab pot limits. Fishers have either a 300 or 500 crab pot limit and the appropriate amount of tags are issued to coincide with the number of crab pots allowed. Pots without tags are presumed to be in excess of limits. Further investigation has shown that the suspect may be fishing more than 40 crab pots over his limit. Thanks to the USCG for their continued and vital assistance to WDFW.

**Stolen Bell Discovered:** While investigating a case in which an individual had frozen wildlife parts in a storage unit which was defaulted on and then purchased by a third party, Officers found that the new owner also found a 3,000 pound bell that had been stolen from a Buddhist monastery in Tacoma in 2005. The bell was returned to the Monastery, but no information was ever forwarded on to the police. The original owner of the unit is also a convicted felon and Officers recovered 12 firearms from his unit that were stashed inside a speaker. Our Officer is putting together all findings and will turn the case over to the investigating agency for the possession of stolen property and felon in possession of a firearm charges.

**Agreement in Principle with the Colville Tribes Extended:** By the joint December 22, 2006, action of Governor Gregoire, Chairman Michael Marchand of the Colville Confederated Tribes, and Director Koenings, the Agreement in Principle signed in December 2004 between the parties has been extended until September 30, 2007. The extension provides additional time to study potential impacts of a modest drawdown of Lake Roosevelt as part of Department of Ecology's Columbia River Water Management Program. The Agreement in Principle with the Colville Confederated Tribes provides for investigation of potential impacts of the Lake Roosevelt drawdown and compensation of the Colville Confederated Tribes for impacts, creates an economic development capital fund for the Tribe, creates a fisheries enhancement capital fund to facilitate joint work on fisheries management, and provides for tribal participation in investigation of the potential for new off-channel storage in the Columbia River system.

**Ocean Policy Work Group Final Report:** The Ocean Policy Work Group's final report is completed. The full report (two volumes) and public comments on the report were posted on the Ocean Policy website and the Governor's Office issued a news release the week of January 8. The report contains descriptions of current ocean habitat and fisheries management practices and recommendations to address such topics as: aquaculture, offshore energy projects, research priorities, and ecosystem-based management approaches. The primary recommendation is to develop a governance structure to continue to coordinate addressing ocean policy issues with other West Coast states, the tribes, federal government agencies, and within Washington State. A team similar to the current working group comprised of representatives from key state agencies, the coastal tribes, and counties is being proposed. Most of the recommendations require legislative action and/or dedicated funding to implement, and the Legislature is expected to consider these recommendations during this session.

**Olympic Coast National Marine Sanctuary (NMS) Advisory Council:** The Advisory Council met on January 19, 2007. Discussion topics included review of the Aqua Energy wave energy development pilot proposal for waters off the Makah Indian Reservation; a subgroup of the Advisory Council is reviewing the draft Environmental Assessment with staff from member agencies (WDFW, Department of Natural Resources, Department of Ecology), tribes, and the Governor's Office. Daniel Basta, National Marine Sanctuary Program head, met with Governor Gregoire and coastal tribal leaders on January 30, 2007 to sign an MOU and charter creating a policy advisory council for the Olympic Coast NMS. This policy council will include representatives from DNR, Ecology, and WDFW and will discuss topics such as operational priorities and the upcoming Sanctuary Management Plan update. In addition, sanctuary staff are engaged with other members of the Governor's Ocean Policy Working Group to continue discussions on how to coordinate and prioritize research within sanctuary waters and elsewhere along the coast.

**Improved printing of Recreation License Documents:** A new software upgrade from Outdoor Central has been tested at a few dealer locations with great success. This software reduces the printing time to approximately 12 to 18 seconds per license sales transaction. Previously, licenses at the point-of-sales have been printing in over two minutes. In addition to speedier printing capabilities, the upgrade improves the image quality and readability of the license document. New settings in printers are being established to eliminate the fading of license documents. The new setting will be completed on all point-of-sales printers by mid-March 2007.

**Hunter Reporting:** Customers with invalid or deleted SSNs are able to report their harvest as of January 11, 2007. However, Outdoor Central did not inform WDFW that this defect was resolved until January 24. We will continue outbound calling to the individuals in this group that have not reported.

**Mineral Prospecting Rule Development Workgroup:** Nominations for public and agency participation in the Mineral Prospecting Rule Development Workgroup were solicited and received. The workgroup was formed to comply with the Commission's direction to develop new mineral prospecting rules as expeditiously as possible. The Director appointed all nominations received and the first meeting occurred January 24, 2007.

## SCIENCE GOAL:

### *PROMOTE DEVELOPMENT AND RESPONSIBLE USE OF SOUND AND OBJECTIVE SCIENCE TO INFORM DECISION-MAKING*

**WDFW is Developing a Hatchery and Genetics Management Plan (HGMP) for North Fork Lewis River Late Winter Steelhead:** Keith Keown wrote the first Draft of an HGMP for North Fork Lewis River Late Winter Steelhead – and then retired. Fortunately for the Department, Keith passed the torch to James Dixon, who is now working with the Lewis River ACC Members (FERC Relicensing Technical Coordination Group) and other stakeholders to make revisions to this document – required under the Endangered Species Act – before submittal to NOAA Fisheries for final review and approval. The FERC Relicensing Settlement Agreement resulted in a Lewis River Hatchery and Supplementation Plan that needs to be consistent with ESA recovery considerations. Some issues and challenges are: How to incorporate recommendation of the Hatchery Scientific Review Group ((HSRG) into the H&S Plan and HGMPs, how to integrate wild broodstock into the hatchery program without “mining” the limited lower Lewis River wild steelhead population, how to distinguish between first generation returns, derived from naturally spawning hatchery fish from wild steelhead spawners, how to achieve adequate fish collection and passage of downstream migrants past dams, how to fund additional facilities infrastructure needed to implement the HGMP, and how to manage for future harvest opportunities on adult steelhead in the lower river and those passed upstream of dams.

**The Molecular Genetics Laboratory:** The Molecular Genetics Laboratory has constructed a genomic library using Chinook salmon DNA. A genomic library is a collection of DNA fragments that we want to study that have been inserted into special strains of bacteria and grown in cell cultures. We constructed our Chinook salmon genomic library to look for single nucleotide polymorphisms (SNPs), a type of DNA variation that we can use to identify the population-of-origin of Chinook salmon that are sampled in ocean fisheries. To construct this library we first cut up Chinook DNA using bacterial enzymes that cut DNA at specific combinations of bases. The DNA fragments were then inserted into bacteria and grown on culture plates in isolated colonies. We then sequenced the fragments in the bacterial colonies. Just last week we sequenced our first fragments. We have now sequenced 15 distinct fragments, and currently are sequencing many more. The next step is to use these sequences to screen DNA from Chinook throughout their range to discover SNPs. The SNPs will be used for a wide variety of projects and hold the promise in the future of allowing us to do more detailed work at lower cost.

**Eastern Washington Riparian Forest Inventory:** A contractor has been selected and \$300,000 appropriated to begin field sampling of 200 riparian sites on Forest and Fish lands in Eastern Washington. Region staff have been a major advocate for this research project which is designed to answer several critical questions about the ability of the Forest Practices Rules to move riparian stands into a desired condition and help answer questions about the extent of insect and disease outbreaks and fire in state and private riparian forests in eastern Washington. This in turn will help with alternate plans and templates.

**Bingham Creek Hatchery Proof of Concept Study:** Personnel in the Ecological Investigations and Marine Fish Science Units and staff from the Bingham Creek Hatchery began a proof of concept study to determine if non-genetic trans-generational marks could be produced in Pacific salmon by injecting solutions of stable strontium chloride into gravid females. Female coho returning to the Bingham Creek Hatchery were used in the study. They were injected intramuscularly with either 9,000 or 30,000-ppm solutions of strontium chloride and held in fish tubes until they were artificially spawned (2, 7, or 14 days post injection). Strontium is a close chemical analog to calcium and occurs naturally in salmonid otoliths. This study was designed to see if its occurrence could be enhanced to create marks in the otoliths of all the progeny produced from females receiving injections. Fertilized eggs from injected females plus those from control fish are currently incubating at the Bingham Hatchery. Otoliths from the fry produced by these eggs will be examined using Inductively Coupled Plasma Mass Spectrometry (ICPMS) to determine if using this approach produced strontium marks. This work is being done to develop an alternative way to mass mark salmonids so that questions related to reproductive success, population structure, and habitat utilization can be addressed.

**SaSI Data Layer for SalmonScape!** On January 2, 2007, the Geographic Information System (GIS) section of Biological Data Systems Unit in Fish Program's Science Division completed a new Salmonid Stock Inventory (SaSI) GIS database for the agency GIS data libraries. It is designed to allow SaSI data users to work with and view SaSI stocks on SalmonScape and for use as map images in agency documents. The new data will be made available on the SalmonScape Internet mapping application during this month.

More than 500 SaSI stocks are currently recognized for salmon, steelhead, bull trout, and cutthroat in Washington. This GIS database includes a separate spatial layer for each stock, along with descriptive attributes such as stock name and status, quality of information and federal listing status. These attributes are viewable on SalmonScape via a sophisticated but user-friendly query system. Each stock can be individually viewed from its upper extent of documented distribution to where it exits either to the Pacific Ocean, Puget Sound or the Columbia River.

We gratefully acknowledge the efforts of dozens of state and tribal fish biologists to contribute their expertise to creating the SaSI data and the Science Division staff who manage the tabular data and make it available for use in GIS.



## **EMPLOYEE GOAL:**

***CREATE AN AGENCY ENVIRONMENT THAT NURTURES PROFESSIONALISM, ACCOUNTABILITY, ENTHUSIASM, AND DEDICATION IN ORDER TO ATTRACT, DEVELOP, AND RETAIN A WORKFORCE THAT CAN SUCCESSFULLY CARRY OUT THE MANDATE OF THE AGENCY.***

**Spokane Radon Mitigation:** A persistent indoor air quality problem (namely radon) has been identified at four hatcheries in the Spokane area, and has finally been held in abeyance at the Spokane Hatchery incubation building. Radon is a colorless, odorless, radioactive, carcinogenic gas that diffuses to the surface from the ground. The gas will dissolve in well or spring water, and is light enough to diffuse through concrete.

A radon mitigation project began last year and was completed in October 2006. The project consisted of two air strippers; piping rearrangements, and feed system improvements to remove the radon from the water used in the incubation building, before the water enters the building. The WDFW Capital Programs and Engineering Division did all of the engineering, fabrication, installation, and commissioning in-house, utilizing its Engineering staff, and construction staff from the Yakima and Lacey Construction Shops (civil, mechanical, and electrical construction). Another component of the mitigation effort was to coat the concrete floor of the incubation building with a radon-blocking, silicate-based concrete sealant. Long Painting, Inc., was hired to apply the coating at this site.

Functionality tests were recently completed, which show the effect of the recently completed project. The conclusions from the test results were:

- The radon strippers remove enough radon from water such that radon in air is reduced from 10.8 to 3.8 and from 22.0 to 5.7 piCi/L (two sampling events). At least 88 % of the unmitigated (old) radon in air level was removed. (piCi/L is pico-Curies per Liter.)
- The floor coating also removed radon (from 12.8 to 3.4 piCi/L).
- These radon mitigation measures were successful.

These techniques for radon removal, namely the use of air strippers to remove radon from water, and coating the incubation building floors, will be implemented in the future in the remaining hatcheries where radon is a problem.